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Differences in Health Care Access and Satisfaction Across Intersections of Race/Ethnicity and Sexual Identity

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Abstract

Purpose—Racial/ethnic and sexual minorities experience numerous health disparities compared with their White and heterosexual counterparts, which may be exacerbated when these social identities intersect. The authors tested for differences in health care access and satisfaction across intersections of sexual identity and race/ethnicity.

Method—A cross-sectional secondary data analysis of the 2012–2018 waves of the Association of American Medical Colleges biannual online Consumer Survey of Health Care Access was conducted. This survey captures a national sample of U.S. adults who reported needing health

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care in the past 12 months. The analytic sample included 29,628 participants. Sixteen possible combinations of sexual identity and race/ethnicity were examined. Health care access and satisfaction were measured with 10 items and an index created from these items. Cumulative prevalence ratios (PRs) for the index and PRs across sexual identity, both individually and in combination with race/ethnicity, for each health care access and satisfaction item were generated.

Results—Compared with White heterosexuals, all other groups had significantly more barriers to care before adjustment. The greatest barriers were observed among non-Hispanic Asian/Pacific Islander/Hawaiian gay/lesbian (unadjusted PR = 3.08; 95% confidence interval [CI]: 2.45, 3.88; adjusted PR = 2.01; 95% CI: 1.59, 2.53), non-Hispanic Black bisexual (unadjusted PR = 2.73; 95% CI: 2.28, 3.27; adjusted PR = 1.83; 95% CI: 1.52, 2.20), non-Hispanic Black other sexual identity (unadjusted PR = 2.27; 95% CI: 1.69, 3.06; adjusted PR = 2.07; 95% CI: 1.53, 2.78), and Hispanic/Latino other sexual identity (unadjusted PR = 2.06; 95% CI: 1.60, 2.65; adjusted PR = 1.39; 95% CI: 1.08, 1.79) participants.

Conclusions—Persons of both racial/ethnic and sexual minority status generally had less health care access and satisfaction than White heterosexuals. An intersectional perspective is critical to achieving equity in quality health care access.

Population-based health studies demonstrate that sexual minorities (e.g., lesbian, gay, bisexual persons) have less access to health care services than their heterosexual counterparts. For example, sexual minorities are more likely than heterosexuals to delay or forgo necessary medical care and to not have a regular health care provider.¹ Research suggests that these disparities can be attributed to negative experiences when sexual minorities use health services (e.g., discrimination) and issues with sexual identity disclosure to providers.^{2,3} Similarly, racial/ethnic minorities experience poorer access to health care compared with White individuals.^{4,5} Studies posit that these health and health care disparities exist and persist due to the historic and present-day economic, social, and medical inequalities experienced by racial/ethnic minorities.¹ Albeit limited, the literature on sexual minorities of color demonstrates that they experience multiple disadvantages to accessing health care compared with heterosexuals and White sexual minorities.^{1,6}

The elimination of health disparities and achieving health equity are core public health priorities, as described in the Healthy People 2030 framework.⁷ Intersectionality theory is especially relevant to health equity, the study of health disparities, and the delivery of culturally competent health care. Intersectionality is defined as the interactive nature of overlapping social identities, such that the social and structural discrimination based on a particular social identity accumulates with the social and structural discrimination based on other social identities. Intersectionality theory is an essential theoretical framework that facilitates the understanding of how these social identities (e.g., race/ethnicity, sexual orientation) and structural level social inequalities (i.e., racism, homophobia) explicate disparate health outcomes.^{8,9} However, few studies have examined the extent to which health care access disparities systematically vary at intersections of sexual identity and racial/ethnic minority status. Furthermore, no studies, to our knowledge, examine how sexual identity and race/ethnicity intersect to impact health care satisfaction. To address this gap in the literature, we tested for differences in health care access and satisfaction across intersections of sexual identity and race/ethnicity. Health care access and satisfaction are

not only key contributors to health disparities but also an important focal point for research and policy interventions to reduce these disparities. Given that health disparities in several diseases are well documented across both race/ethnicity and sexual identity, understanding the drivers of these disparities is of great importance.¹⁰

Method

Data source and sample

We performed a cross-sectional secondary data analysis using data from the 2012–2018 waves of the Association of American Medical Colleges (AAMC) biannual Consumer Survey of Health Care Access. This is an online survey conducted for the AAMC Center for Workforce Studies by an external firm to capture a national sample of U.S. adults who reported needing health care in the last 12 months. The sampling methodology has previously been described in detail.¹¹ Demographics for Consumer Survey of Health Care Access respondents are similar to those of other nationally representative surveys (e.g., the National Health Interview Survey) across sex, race/ethnicity, and most socioeconomic factors, but with some income differences (i.e., Consumer Survey of Health Care Access respondents had a lower median income) likely due to the survey's restriction to individuals who reported needing health care in the past 12 months.¹¹

Ethical approval

This research was deemed exempt from review by the University of Maryland, College Park Institutional Review Board (IRB #1542225-1), as it is secondary data analysis.

Measures

Race/ethnicity and sexual identity.—To measure differences across the intersections of sexual identity and race/ethnicity, we created a combined variable from sexual identity (bisexual, gay/lesbian, heterosexual, other sexual identity) and race/ethnicity (non-Hispanic Asian/Pacific Islander/Hawaiian, non-Hispanic Black, Hispanic/Latino, non-Hispanic White) with 16 possible combinations. Non-Hispanic White heterosexual was used as the reference category for all other groups.

Health care access and satisfaction.—We measured health care access and satisfaction with 10 items (item 8 below counted as 2 items as respondents answered it in relation to both sexual identity and race/ethnicity) from the Consumer Survey of Health Care Access:

1. “At any time during the last 12 months, were you ever without health insurance coverage?” (yes, no);
2. “Thinking about the times you needed medical care in the last 12 months, how often were you able to get it?” (always, not always);
3. “In the last 12 months, were you ever delayed in getting medical care you or a health care professional believed necessary?” (yes, no);

4. “In the last 12 months, was there any time when you did not fill a prescription for medicine because of the out-of-pocket cost?” (yes, no);
5. “In the last 12 months, was there any time when you skipped a medical test, treatment, or follow-up recommended by a doctor because of the out-of-pocket cost?” (yes, no);
6. “In the last 12 months, were there times when you had problems paying or were unable to pay for medical bills?” (yes, no);
7. “Would you recommend the provider who treated you during your most recent medical care visit to family and friends?” (yes, no);
8. “During your most recent medical care visit, do you think any of the following influenced your health care provider to treat you unfairly?” (participants answered this question twice, once in relation to select sexual identity [yes, no] and once in relation to race/ethnicity [yes, no]); and
9. “All things considered, how satisfied are you with the health care you received during your most recent medical care visit?” (satisfied, not satisfied).

We dichotomized the needed medical care measure (item 2) and health care satisfaction measures (items 7–9) due to very small response frequencies for certain answers. We also created a combined health care barriers index from all of the items (ranging from 0 to 10), in which higher values represented more barriers to health care. The items demonstrated acceptable internal consistency (Cronbach’s $\alpha = 0.76$), and there were positive associations (all $P < .001$) between all items.

Analytic strategy

Missing data.—Among the waves we used in our analysis (2012–2018), nonresponse for all variables was low, with a maximum of 8% missingness for any variable and less than 2% missingness for most variables. We, therefore, used intrascale stochastic imputation to impute missing variables within the health care access and satisfaction measures. With the imputed data, our final analytic sample consisted of 29,628 participants.

Regression analyses.—For the health care barriers index (our primary outcome), we generated cumulative prevalence ratios (PRs), as these allow for the use of the continuous outcome (i.e., health care access and barriers) as an ordinal measure, avoiding assumptions of normality. For individual health care access and satisfaction items, we constructed Poisson regression models to generate PRs reflecting the difference in prevalence of each health care outcome between heterosexual and sexual minority participants, both individually and in combination with race/ethnicity. Although it is frequently used for count data, we used Poisson regression here because it generates PRs when used with binary outcomes and allows for more robust incorporation of confounders compared with log-binomial modeling. We also included models adjusted for sex, age, education level, annual household income, marital status, employment, and region (or sociodemographics). These covariates were selected because they produced at least a 10% change in estimates (i.e., in PRs and 95% confidence intervals [CIs]) when included in the regression models.

Quality assurance and statistical software.—We tested collinearity by measuring the variance inflation factor (VIF) in all models. There was no evidence of collinearity (VIF < 5 for all models). We identified no influential outliers after using both leverage and Cook's distances. All analyses were conducted using SAS 9.4 (SAS Institute Inc., Cary, North Carolina).

Results

Sample characteristics

In the full sample (29,628; throughout this section, the numbers provided are unweighted to accurately represent the sample size while the percentages provided are weighted as weights were used in the analysis), 1,446 (4.9%) participants were non-Hispanic Asian/Pacific Islander/Hawaiian, 3,654 (11.1%) were non-Hispanic Black, and 4,706 (15.9%) were Hispanic/Latino. Additionally, 1,183 (4.3%) participants identified as bisexual, 971 (2.8%) as gay/lesbian, and 340 (1.3%) as other sexual identity. Among the 29,628 participants, 18,224 (61.8%) identified as both non-Hispanic White and heterosexual.

Regression analyses

In our examination of racial/ethnic and sexual identity groups individually, all sexual minority groups had significantly greater barriers to care than heterosexuals, both before and after adjustment for sociodemographics (see Supplemental Digital Appendix 1 at <http://links.lww.com/ACADMED/B147>). Although all racial/ethnic groups had significantly greater barriers to care than White participants in the unadjusted analyses, only Hispanic/Latino participants had significantly greater barriers to care after adjustment. When examining intersections of race/ethnicity and sexual identity, all groups had significantly greater barriers to care compared with White heterosexuals before adjustment (Table 1). After adjusting for sociodemographics, most intersectional racial/ethnic and sexual minority, Hispanic/Latino heterosexual, and non-Hispanic White bisexual and other sexual identity participants had significantly greater barriers to health care compared with White heterosexuals. The greatest barriers were observed among non-Hispanic Asian/Pacific Islander/Hawaiian gay/lesbian (unadjusted PR = 3.08; 95% CI: 2.45, 3.88; adjusted PR = 2.01; 95% CI: 1.59, 2.53), non-Hispanic Black bisexual (unadjusted PR = 2.73; 95% CI: 2.28, 3.27; adjusted PR = 1.83; 95% CI: 1.52, 2.20), non-Hispanic Black other sexual identity (unadjusted PR = 2.27; 95% CI: 1.69, 3.06; adjusted PR = 2.07; 95% CI: 1.53, 2.78), and Hispanic/Latino other sexual identity (unadjusted PR = 2.06; 95% CI: 1.60, 2.65; adjusted PR = 1.39; 95% CI: 1.08, 1.79) participants. Examining the 10 items (see above) individually, there were no significant differences in any measure of health care access or satisfaction between White heterosexual participants and heterosexual participants of any other race/ethnicity after adjustment, with 1 exception: Hispanic/Latino heterosexual participants had 35% lower proportions of ability to access needed health care when compared with White heterosexual participants (see Supplemental Digital Appendix 2 at <http://links.lww.com/ACADMED/B147>). In contrast, nearly every sexual minority group had either lower health care access or satisfaction when compared with White heterosexuals, although patterns varied by sexual identity and race/ethnicity. The most notable disparities were observed among Hispanic/Latino gay/lesbian participants, Hispanic/

Latino other sexual identity participants, non-Hispanic Black bisexual participants, and non-Hispanic Asian/Pacific Islander/Hawaiian participants of all sexual minority identities.

Discussion

Previous studies demonstrated that sexual and racial/ethnic minorities experience disadvantages when accessing health care.^{6,12–14} However, studies rarely examined how the intersection between the disadvantaged social position of being a sexual minority and the structural oppression experienced by racial/ethnic minorities simultaneously impacts health care access and satisfaction. Overall, we found that the greatest barriers to care were observed among individuals with intersecting racial/ethnic and sexual minority identities, followed by non-Hispanic White sexual minorities, racial/ethnic minority heterosexuals, and finally non-Hispanic White heterosexuals.

Among non-Hispanic Black and non-Hispanic White participants, those who were also bisexual or other sexual identity participants had greater barriers to care compared with gay/lesbian or heterosexual participants of the same race/ethnicity, both before and after adjustment for sociodemographics. The literature suggests that bisexual people experience sexuality-based discrimination differently than monosexual sexual minorities. For instance, they experience interpersonal and societal homophobia from heterosexuals in addition to biphobia and bisexuality erasure (or the dismissal of bisexuality as a valid, real sexual identity) from those who identify as gay or lesbian.^{15–17} Additionally, bisexual people often interact less with other sexual minorities, thus, limiting their ability to benefit from the social networks and supports that are often associated with resilience in the lesbian, gay, bisexual, and transgender community.¹⁸ Despite qualitative and anecdotal evidence suggesting sexual minorities of color perceive high levels of stigma within their communities, there is limited quantitative evidence that sexual minorities of color experience more heterosexism than White sexual minorities.¹⁹ Although we did not assess intersectional forms of bias, our findings are consistent with intersectional perspectives of health. That is, we observed that participants who were both racial/ethnic and sexual minorities generally had less health care access and satisfaction than White heterosexuals, consistent with similar findings in previous research.^{9,20} Our findings reinforce the significance of culturally competent and accessible care. Specific to the field of academic medicine, our findings underscore the importance of training health care providers in culturally competent care for racial/ethnic and sexual minorities. This necessitates incorporating intersectional frameworks in training activities, as our findings demonstrate that there are substantial differences in health care access and satisfaction at the intersections of racial/ethnic and sexual minority status. Overall, a greater emphasis on understanding the contexts of minority patients' experiences in health care is recommended, especially in developing curricula and training programs for health care professionals.

In our study, after adjusting for sociodemographics, non-Hispanic Black and non-Hispanic Asian/Pacific Islander/Hawaiian heterosexuals did not have significantly more barriers to care than their non-Hispanic White counterparts. This suggests that socioeconomic racism (e.g., employment-, wage-, and education-related racism) accounts for a large proportion of the racism that is experienced in these settings. This is evidenced by

the unadjusted models, where among heterosexuals, all racial/ethnic minority groups face greater barriers to care than their non-Hispanic White counterparts. Thus, it is critically important to note that adjusting for these socioeconomic factors may remove much of the real impacts of racism and homophobia present, and in our study, this reduction impacted racial/ethnic disparities more than intersectional race/ethnicity- and sexual identity-based disparities. That is, all heterosexual racial/ethnic minorities in our study faced significantly greater barriers to health care compared with non-Hispanic White heterosexuals, and these barriers were primarily driven by socioeconomic differences, which are very real dimensions of racism, as evidenced by the barriers decreasing once we adjusted for sociodemographics. Non-Hispanic White sexual minorities did have more barriers to care than their heterosexual counterparts both before and after adjustment; however, the socioeconomic impact of homophobia may reflect a smaller proportion of health care discrimination among non-Hispanic White sexual minorities than it does among intersectional racial and sexual minorities, as demonstrated by our adjusted findings. While we adjusted for sociodemographics, it should be noted that this does not represent true confounding (as our exposures are race/ethnicity and sexual identity), but rather this allowed us to assess how much of the measured health care access and satisfaction disparities were due to socioeconomic and other demographic differences. Notably, though adjustment attenuated many of the estimates, most intersectional sexual and racial/ethnic minorities still had significantly more barriers to care even after adjusting for a range of socioeconomic and demographic factors. Additional qualitative studies designed to investigate intersectional experiences of racism and homophobia in health care settings could help contextualize our findings.

Strengths of our study include the use of a robust, nationally representative sample, allowing for granular analyses of intersections between sexual identity and race/ethnicity. We also used a wide range of health care access and satisfaction measures, covering several dimensions of health care experiences. Finally, our study fills a notable gap in the literature on how intersections of sexual identity and race/ethnicity are associated with health care access and satisfaction.

Our study has important limitations to acknowledge as well. First, our sample is limited to U.S. adults who reported that they needed health care in the last 12 months, limiting generalizability. Second, while we identified that those individuals in the other sexual identity category experienced barriers to health care, it is difficult to interpret these findings as this may represent a wide range of sexual identities. We were unable to stratify data across race and Hispanic/Latino ethnicity (e.g., Hispanic Black) due to sample size limitations, particularly when examining Hispanic/Latino ethnicity within sexual minority groups. Finally, due to the subjective nature of many of the items, reporting bias may have influenced the results, such as underreporting or overreporting of experiences of health care discrimination. Nonetheless, our findings underscore the importance of considering intersectional identities in the delivery of culturally competent care, as significantly lower health care satisfaction was generally only observed at intersections of sexual and racial/ethnic minority status.

Conclusions

Ensuring that everyone, regardless of sexual identity or race/ethnicity, receives relevant and appropriate health care services is essential in achieving health equity. As policy makers and health care providers work to eliminate health disparities, it is essential that they address implicit bias, heteronormativity, and stigmatization in health care systems. Equally, to achieve equity in quality health care access, it is critical that an intersectional perspective is employed when conducting research and creating policies to ensure that information and systems that do not address the nuances and influence of social identities in health care access and experiences are not reinforced.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Cumulative PRs and 95% CIs for a Combined Index of 10 Health Care Access and Satisfaction Items Across Race/Ethnicity and Sexual Identity (n = 29,628)^a

Table 1

Characteristic (no., %)	Unadjusted PR (95% CI)	Adjusted PR (95% CI)
Race/ethnicity and sexual identity		
Non-Hispanic Asian/Pacific Islander/Hawaiian bisexual (56, 0.2)	1.79 (1.32, 2.41)	1.26 (0.93, 1.70)
Non-Hispanic Asian/Pacific Islander/Hawaiian gay/lesbian (80, 0.3)	3.08 (2.45, 3.88)	2.01 (1.59, 2.53)
Non-Hispanic Asian/Pacific Islander/Hawaiian heterosexual (1,285, 4.4)	1.21 (1.13, 1.30)	0.89 (0.82, 0.95)
Non-Hispanic Asian/Pacific Islander/Hawaiian other sexual identity (25, 0.1)	1.87 (1.16, 3.02)	1.40 (0.86, 2.26)
Non-Hispanic Black bisexual (139, 0.5)	2.73 (2.28, 3.27)	1.83 (1.52, 2.20)
Non-Hispanic Black gay/lesbian (123, 0.4)	2.02 (1.66, 2.47)	1.38 (1.13, 1.69)
Non-Hispanic Black heterosexual (3,340, 11.3)	1.26 (1.20, 1.32)	0.99 (0.95, 1.04)
Non-Hispanic Black other sexual identity (52, 0.2)	2.27 (1.69, 3.06)	2.07 (1.53, 2.78)
Hispanic/Latino bisexual (269, 0.9)	1.92 (1.68, 2.21)	1.11 (1.01, 1.23)
Hispanic/Latino gay/lesbian (204, 0.7)	1.62 (1.37, 1.91)	1.11 (1.00, 1.24)
Hispanic/Latino heterosexual (4,160, 14.1)	1.62 (1.56, 1.69)	1.09 (1.04, 1.13)
Hispanic/Latino other sexual identity (73, 0.3)	2.06 (1.60, 2.65)	1.39 (1.08, 1.79)
Non-Hispanic White bisexual (719, 2.4)	1.61 (1.47, 1.76)	1.15 (1.05, 1.26)
Non-Hispanic White gay/lesbian (564, 1.9)	1.12 (1.00, 1.25)	1.08 (0.97, 1.21)
Non-Hispanic White other sexual identity (190, 0.6)	1.86 (1.58, 2.20)	1.52 (1.28, 1.79)
Non-Hispanic White heterosexual (18,224, 61.8)	Reference	Reference
Sex		
Female (15,932, 52.2)	Reference	Reference
Male (14,610, 47.8)	1.06 (1.03, 1.09)	1.14 (1.10, 1.17)
Education level		
Less than high school (10,237, 33.5)	Reference	Reference
High school (10,268, 33.6)	0.94 (0.91, 0.98)	1.00 (0.96, 1.03)
College (6,285, 20.6)	0.90 (0.86, 0.94)	0.83 (0.80, 0.87)
Graduate degree (3,760, 12.3)	0.94 (0.90, 0.99)	0.98 (0.93, 1.04)

Characteristic (no., %)	Unadjusted PR (95% CI)	Adjusted PR (95% CI)
Annual household income		
\$24,999 or less (6,387, 20.9)	Reference	Reference
\$25,000–\$49,999 (7,049, 23.1)	0.91 (0.87, 0.95)	0.89 (0.85, 0.93)
\$50,000–\$74,999 (5,960, 19.5)	0.81 (0.78, 0.85)	0.80 (0.76, 0.84)
\$75,000–\$99,999 (4,130, 13.5)	0.92 (0.87, 0.96)	0.80 (0.76, 0.85)
\$100,000 or more (7,023, 23.0)	0.88 (0.84, 0.92)	0.77 (0.73, 0.82)
Age		
18–34 (8,993, 29.4)	Reference	Reference
35–44 (5,234, 17.1)	0.99 (0.95, 1.03)	0.96 (0.92, 1.00)
45–54 (5,346, 17.5)	0.64 (0.61, 0.67)	0.61 (0.58, 0.64)
55–64 (4,626, 15.1)	0.45 (0.43, 0.47)	0.43 (0.41, 0.46)
65+ (6,350, 20.8)	0.25 (0.24, 0.26)	0.24 (0.23, 0.26)
Marital status		
Married (16,529, 54.1)	0.83 (0.73, 0.93)	0.94 (0.84, 1.05)
Widowed (1,603, 5.3)	0.59 (0.51, 0.67)	1.06 (0.95, 1.18)
Divorced (3,697, 12.1)	0.96 (0.86, 1.07)	1.07 (0.94, 1.22)
Separated (558, 1.8)	1.25 (1.12, 1.40)	1.05 (0.94, 1.18)
Single (8,161, 26.7)	Reference	Reference
Region		
Midwest (6,561, 21.5)	0.86 (1.02, 0.90)	0.89 (0.85, 0.93)
Northeast (5,610, 18.4)	0.82 (1.02, 0.86)	0.87 (0.84, 0.92)
South (11,169, 36.6)	1.00 (1.02, 1.04)	1.02 (0.98, 1.06)
West (7,208, 23.6)	Reference	Reference
Employment		
Full time (12,949, 42.4)	0.97 (0.92, 1.01)	0.96 (0.92, 1.00)
Part time (4,901, 16.0)	0.90 (0.86, 0.93)	0.88 (0.83, 0.93)
Retired (6,752, 22.1)	0.41 (0.39, 0.43)	0.73 (0.69, 0.76)
Student/Homemaker (3,366, 11.0)	0.87 (0.83, 0.91)	0.85 (0.80, 0.90)
Unemployed (2,580, 8.5)	Reference	Reference

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Abbreviations: CI, confidence interval; PR, prevalence ratio.

^a Items are from the 2012–2018 waves of the Association of American Medical Colleges biannual Consumer Survey of Health Care Access. See the main text for more information on the survey and the 10 health care access and satisfaction items. The numbers provided are unweighted to accurately represent the sample size, while the percentages provided are weighted as weights were used in the analysis. Statistically significant ($P < .05$) PRs and 95% CIs are bolded. Values > 1 represent relatively greater barriers to health care compared with the reference. Values < 1 represent relatively fewer barriers to health care compared with the reference.